LEONA™ 14G33

Asahi Kasei Corporation - *Polyamide 66*

General Information

General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • North America	
Filler / Reinforcement	• Glass Fiber, 33% Filler by Weight		
Additive	• Heat Stabilizer		
Features	• Heat Stabilized		
Uses	• Automotive Applications • Automotive Under the Hood	• Electrical/Electronic Applications • Structural Parts	
Automotive Specifications	• GM GMW15702-110032 Color: Black	• STELLANTIS MS-DB-41 CPN 1900 Color: Black	• STELLANTIS MS-DB-41 CPN 2727 Color: Black
Part Marking Code (ISO 11469)	• >PA66-GF33<		

Properties [1]

Physical	Dry	Conditioned	Unit	Test Method
Density / Specific Gravity	1.39	--		ASTM D792
Density	1.39	--	g/cm³	ISO 1183
Molding Shrinkage				Internal Method
Across Flow	0.80	--	%	
Flow	0.40	--	%	
Water Absorption (Equilibrium, 73°F, 50% RH)	--	1.7	%	ISO 62
Mechanical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Tensile Modulus (73°F)	1.42E+6	1.13E+6	psi	ISO 527-1
Tensile Strength	30500	19600	psi	ASTM D638
Tensile Stress (Break, 73°F)	30200	20700	psi	ISO 527-2
Tensile Elongation (Break)	3.0	5.0	%	ASTM D638
Tensile Strain (Break, 73°F)	4.0	6.0	%	ISO 527-2
Flexural Modulus	1.51E+6	914000	psi	ASTM D790
Flexural Modulus (73°F)	1.39E+6	972000	psi	ISO 178
Flexural Strength	47100	30500	psi	ASTM D790
Flexural Stress (73°F)	43800	30900	psi	ISO 178
Taber Abrasion Resistance (1000 Cycles)	--	15.0	mg	ASTM D1044
Impact	**Dry**	**Conditioned**	**Unit**	**Test Method**
Charpy Notched Impact Strength	6.2	7.6	ft·lb/in²	ISO 179
Charpy Unnotched Impact Strength	43	46	ft·lb/in²	ISO 179
Notched Izod Impact	2.4	3.2	ft·lb/in	ASTM D256
Hardness	**Dry**	**Conditioned**	**Unit**	**Test Method**
Rockwell Hardness				ASTM D785
M-Scale	96	75		
R-Scale	120	--		
Rockwell Hardness				ISO 2039-2
M-Scale	96	75		
R-Scale	120	--		
Thermal	**Dry**	**Conditioned**	**Unit**	**Test Method**
Deflection Temperature Under Load (66 psi, Unannealed)	500	--	°F	ASTM D648
Deflection Temperature Under Load (66 psi, Unannealed)	500	--	°F	ISO 75-2/B

Deflection Temperature Under Load (264 psi, Unannealed)	482	--	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	482	--	°F	ISO 75-2/A
CLTE - Flow	1.1E-5	--	in/in/°F	ASTM D696
Thermal Conductivity	2.1	--	Btu·in/hr/ft²/°F	
Electrical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Surface Resistivity	1.0E+15	--	ohms	ASTM D257
Surface Resistivity	1.0E+15	--	ohms	IEC 60093
Volume Resistivity	1.0E+15	--	ohms·cm	ASTM D257
Volume Resistivity (73°F)	1.0E+15	--	ohms·cm	IEC 60093
Dielectric Strength	840	--	V/mil	ASTM D149
Electric Strength	840	--	V/mil	IEC 60243-1
Comparative Tracking Index (0.118 in)	425	--	V	IEC 60112
Flammability	**Dry**	**Conditioned**	**Unit**	**Test Method**
Flame Rating (0.030 in)	HB	--		UL 94

Processing Information

Injection	**Dry**	**Unit**
Drying Temperature - Vacuum Dryer	176 to 194	°F
Drying Time - Vacuum Dryer	2.0 to 3.0	hr
Processing (Melt) Temp	527 to 563	°F
Mold Temperature	167 to 185	°F

Notes

[1] Typical properties: these are not to be construed as specifications.